Pandemic Influenza
Status and Implications
Information for VA Health Care Providers

This information is provided by the U.S. Department of Veterans Affairs (VA) for health care providers including volunteers and trainees such as interns and residents. It is intended to increase awareness and preparedess during this time of pandemic alert.

STATUS OF PANDEMIC ALERT

The chart below defines the World Health Organization (WHO) Global Pandemic Phases, and stages of the U.S. Federal Government Response at http://www.whitehouse.gov/homeland/nspi_implementation_charts.pdf.

CURRENTLY, WE ARE AT THE WHO PANDEMIC ALERT PHASE 3.

At this time, the H5N1 avian influenza virus is endemic in the bird population around the world, and has caused illness in a limited number of humans who had direct contact with infected birds. The virus does not appear to have mutated into a form that is efficiently transmitted from person to person. The development of such a mutation would likely herald the beginning of the next global influenza outbreak (pandemic).

NOTE: Characteristics of pandemic influenza cannot be predicted with certainty; the information in this fact sheet is based on past experiences with yearly seasonal influenza and the pandemics of 1918-19, 1957-58, and 1968-69.

WHO PHASES		FEDERAL GOVERNMENT RESPONSE STAGES	
INTER-PANDEMIC PERIOD			
1	No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human disease is considered to be low.	0	New domestic animal outbreak in at–risk country
2	No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.		
PANDEMIC ALERT PERIOD			
3	Human infection(s) with a new subtype, but no human-to-human spread, or at most, rare instances of spread to a close contact.	0	New domestic animal outbreak in at–risk country
		1	Suspected human outbreak overseas
4	Small cluster(s) with limited human-to-human transmission, but spread is highly localized, suggesting that the virus is not welladapted to humans.	2	Confirmed human outbreak overseas
5	Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).		
PANDEMIC PERIOD			
6	Pandemic phase: increased and sustained transmission in the general population.	3	Widespread human outbreaks in multiple locations overseas
		4	First human case in North America
		5	Spread throughout United States
		6	Recovery and preparation for subsequent waves

From the National Strategy for Pandemic Influenza: Implementation Plan
http://www.whitehouse.gov/homeland/pandemic-influenza-implementation.html

Implications of an Influenza Pandemic on Health Care Delivery

(This section is based upon planning assumptions adapted from the U.S. Department of Human Services (HHS) Pandemic Influenza Plan found at www.hhs.gov/pandemicflu/plan/.)

- Susceptibility to the pandemic influenza subtype will be universal.
- A vaccine against pandemic flu may not be available at the start of the pandemic.
- Antiviral drugs will be in limited supply. Their effectiveness in controlling pandemics is untested.
- Due to widespread illness and disruption of services, shortages of hospital supplies can be expected. These may include vaccines and antivirals, ventilators, personal protective equipment, and possibly even food supplies.
- The clinical disease attack rate will be 30% in the overall population. Illness rates will be highest among school-aged children (about 40%) and decline with age. Among working adults, an average of 20% will become ill during a community outbreak.
- Of those who become ill with influenza, 50% will seek outpatient medical care.
- Past influenza pandemics have varied greatly in severity of impact. To assist prepandemic planning, the Federal government has developed a Pandemic Severity Index. It is based on case fatality ratio and may be used early in a pandemic for small clusters and outbreaks.
- Risk groups for severe and fatal infections cannot be predicted with certainty. For seasonal influenza, infants and the elderly, persons with chronic illnesses, and pregnant women are usually at higher risk of complications from influenza infections. In contrast, in the 1918 pandemic, most deaths occurred among young, previously healthy adults.
- The typical incubation period (the time between acquiring the infection until becoming ill) for influenza averages 2 days. We assume this would be the same for a novel strain that is transmitted between people by respiratory secretions.
- Persons who become ill may shed virus and can transmit infection for one-half to one day before the onset of illness. Viral shedding and the risk for transmission will be greatest during the first 2 days of illness.
- On average about two secondary infections will occur as a result of transmission from someone who is ill. Some estimates from past pandemics have been higher, with up to about three secondary infections per primary case.
- Historically, localized pandemic outbreaks lasted about 6 to 8 weeks. At least two pandemic disease waves are likely.
- The timing of pandemic disease waves cannot be predicted with certainty. The largest waves in the U.S. during 20th century pandemics occurred in the fall and winter. Experience from the 1957 pandemic may be instructive in that the first U.S. cases occurred in June but no community outbreaks occurred until August and the first wave of illness peaked in October.

IMPORTANT WEB SITES

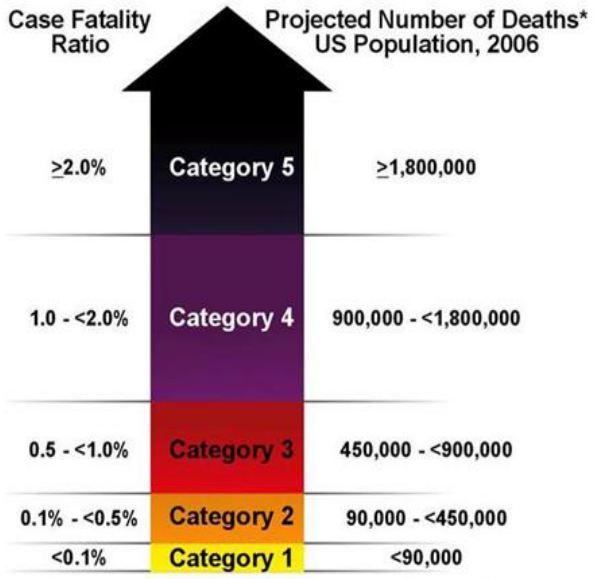
U.S. Federal Government
www.pandemicflu.gov

Department of Veterans Affairs
www.publichealth.va.gov/Flu/pandemicflu
www.publichealth.va.gov/InfectionDontPassItOn
vaww.vhaco.va.gov/phshcg/Flu/pandemicflu.htm
(VA staff only)

World Health Organization
www.who.int/csr/disease/avian_influenza/en/

PANDEMIC SEVERITY INDEX

This index provides a graphic depiction of the U.S. Pandemic Severity Index by case of fatality ratio, with ranges of projected U.S. deaths at a constant 30 percent illness rate and without mitigation by any intervention.



Source: http://www.pandemicflu.gov/plan/community/mitigation.html

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